AMENDMENT TO THE CLAIMS

Claims 1-30 are pending in the instant application. Claims 12-20 have been amended.

Listing of claims:

1.   (Original) A method for providing and configuring communication links, the method comprising:

determining any one usable media pair from all existing media pairs;

selecting any one channel from all existing channels; and

assigning said selected any one channel to said any one media pair.

2.   (Previously presented) The method according to claim 1, wherein said determining comprises monitoring at least said any one usable media pair.

3.   (Previously presented) The method according to claim 2, wherein said monitoring comprises detecting an existence of a communication signal on said any one usable media pair.

4.   (Previously presented) The method according to claim 1, comprising determining which one of said all existing media pairs facilitates communication at a maximum communication speed.

5.   (Previously presented) The method according to claim 4, comprising cross-connecting said selected any one channel to said one of said all existing media pairs that facilitates communication at a maximum communication speed.

6.   (Previously presented) The method according to claim 1, comprising determining which one of said all existing media pairs facilitates operating at a reduced communication speed.

7.   (Previously presented) The method according to claim 6, comprising cross-connecting said selected any one channel to said one of said all existing media pairs that facilitates operating at said reduced communication speed.

8.   (Previously presented) The method according to claim 1, comprising:
    flipping at least one of a channel and a media pair assignment of a previously defined general channel and media pair configuration which defines channel and media pair assignments for at least a portion of said all existing media pairs; and

defining said flipped at least one said channel and said media pair assignment as a default channel and media pair configuration.

9.   (Previously presented) The method according to claim 1, comprising identifying a status of at least one of said all existing media pairs and at least one of said all existing channels.

10.   (Previously presented) The method according to claim 9, comprising storing said identified status.

11.   (Previously presented) A machine-readable storage having stored thereon, a program having at least one code section for providing and configuring communication links, the at least one code section being executable by a machine for causing the machine to perform steps comprising:

determining any one usable media pair from all existing media pairs;

selecting any one channel from all existing channels; and

assigning said selected any one channel to said any one media pair.

12.   (Currently Amended) The machine-readable storage according to claim 11, ~~comprising~~ wherein said at least one code section comprises code for monitoring at least said any one usable media pair.

13.   (Currently Amended) The machine-readable storage according to claim 12, ~~comprising~~ wherein said at least one code section comprises code for detecting an existence of a communication signal on said any one usable media pair.

14.   (Currently Amended) The machine-readable storage according to claim 11, ~~comprising~~ wherein said at least one code section comprises code for determining which one of said all existing media pairs facilitates communication at a maximum communication speed.

15.   (Currently Amended) The machine-readable storage according to claim 14, ~~comprising~~ wherein said at least one code section comprises code for cross-connecting said selected any one channel to said one of said all existing media pairs that facilitates communication at a maximum communication speed.

16.   (Currently Amended) The machine-readable storage according to claim 11, ~~comprising~~ wherein said at least one code section comprises code for determining which one of said all existing media pairs operates communication at a reduced communication speed.

17.   (Currently Amended) The machine-readable storage according to claim 16, ~~comprising~~ wherein said at least one code section comprises code for cross-connecting said selected any one channel to said one of said all existing media pairs that operates communication at said reduced communication speed.

18.   (Currently Amended) The machine-readable storage according to claim 11, ~~comprising~~ wherein said at least one code section comprises code for:

flipping at least one of a channel and a media pair assignment of a previously defined general channel and media pair configuration which defines channel and media pair assignments for at least a portion of said all existing media pairs; and

defining said flipped at least one said channel and said media pair assignment as a default channel and media pair configuration.

19.   (Currently Amended) The machine-readable storage according to claim 11, ~~comprising~~ wherein said at least one code section comprises code for identifying a status of at least one of said all existing media pairs and at least one of said all existing channels.

20.   (Currently Amended) The machine-readable storage according to claim 19, ~~comprising~~ wherein said at least one code section comprises code for storing said identified status.

21.   (Previously presented) A system for providing and configuring communication links, the system comprising:

at least one controller enabled to determine any one usable media pair from all existing media pairs;

at least one selector enabled to select any one channel from all existing channels; and

said at least one controller enabled to assign said selected any one channel to said any one media pair.

22.   (Previously presented) The system according to claim 21, wherein said at least one controller is enabled to determine at least said any one usable media pair.

23.   (Previously presented) The system according to claim 22, wherein said at least one controller comprises a detector enabled to detect an existence of a communication signal on said any one usable media pair.

24.   (Previously presented) The system according to claim 21, wherein said at least one controller is enabled to determine which one of said all existing media pairs facilitates communication at a maximum communication speed.

25.   (Previously presented) The system according to claim 24, wherein said selector is enabled to cross-connect said selected any one channel to said one of said all existing media pairs that facilitates communication at a maximum communication speed.

26.   (Previously presented) The method according to claim 21, wherein said at least one controller is enabled to determine which one of said all existing media pairs operates communication at a reduced communication speed.

27.   (Previously presented) The system according to claim 26, wherein said selector is enabled to cross-connect said selected any one channel to said one of said all existing media pairs that operates communication at said reduced communication speed.

28.   (Previously presented) The system according to claim 21, wherein said selector is enabled to flip at least one of a channel and a media pair assignment of a previously defined general channel and media pair configuration

which defines channel and media pair assignments for at least a portion of said all existing media pairs; and

said controller is enabled to define said flipped at least one said channel and said media pair assignment as a default channel and media pair configuration.

29. (Previously presented) The system according to claim 21, wherein said at least one controller is enabled to identify a status of at least one of said all existing media pairs and at least one of said all existing channels.

30. (Previously presented) The system according to claim 29, comprising at least one register enabled to store said identified status.